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OM protein - protein search, using sw model

Run on: November 17, 2003, 17:11:13 ; Search time 15.0179 Seconds
(without alignments)
81.704 Million cell updates/sec

Title: US-09-749-637A-270

Perfect score: 177

Sequence: 1 LKWCIFSGDLCPFRSDHIGCCSGKCAPVCL 29

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 328717 seqs, 42310858 residues

Total number of hits satisfying chosen parameters: 328717

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA.*
1: /cgn2_6/prodata/1/iaa/5A COMB.pep.*
2: /cgn2_6/prodata/1/iaa/5B COMB.pep.*
3: /cgn2_6/prodata/1/iaa/6A COMB.pep.*
4: /cgn2_6/prodata/1/iaa/6B COMB.pep.*
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6: /cgn2_6/prodata/1/iaa/backfiles1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	70	39.5	37	1	US-08-682-485A-4
2	70	39.5	37	2	US-08-933-314-4
3	66	37.3	78	1	US-07-689-693B-5
4	66	37.3	78	2	US-08-624-123-13
5	66	37.3	78	1	US-08-716-308-2
6	66	37.3	78	2	US-08-716-308-16
7	66	37.3	78	5	PCT-US96-05262-14
8	61	34.5	27	1	US-07-689-693B-6
9	58	32.8	37	1	US-08-682-485A-5
10	58	32.8	37	2	US-08-933-314-5
11	55.5	31.4	29	4	US-09-136-769A-5
12	55.5	31.4	29	4	US-09-136-769A-16
13	52	29.4	37	1	US-08-682-485A-2
14	52	29.4	37	2	US-08-933-314-2
15	51.5	29.1	111	1	US-08-543-238-8
16	51.5	29.1	111	1	US-08-420-526-8
17	51	28.8	36	1	US-08-682-485A-1
18	51	28.8	36	2	US-08-933-314-1
19	51	28.8	489	4	US-09-252-991A-22896
20	49.5	28.0	36	2	US-08-505-486-86
21	49.5	28.0	36	3	US-08-801-028-86
22	49.5	28.0	36	3	US-09-340-154-86
23	49.5	28.0	36	4	US-09-482-611B-86
24	49.5	28.0	36	5	PCT-US95-09338-86
25	49.5	28.0	36	5	PCT-US95-09339-86
26	49.5	28.0	165	4	US-09-370-838-57
27	49.5	28.0	374	4	US-09-347-878-52

28 49.5 28.0 386 4 US-09-370-838-81 Sequence 81, Appl
29 49 27.7 37 1 US-08-682-485A-8 Sequence 8, Appl
30 49 27.7 37 2 US-08-933-314-8 Sequence 8, Appl
31 49 27.7 119 2 US-08-274-215A-12 Sequence 12, Appl
32 49 27.7 119 2 US-08-765-662-12 Sequence 12, Appl
33 49 27.7 119 3 US-09-184-933-12 Sequence 12, Appl
34 49 27.7 119 5 PCT-US95-08745-12 Sequence 12, Appl
35 49 27.7 350 2 US-08-765-662-14 Sequence 14, Appl
36 49 27.7 350 5 PCT-US95-08745-14 Sequence 14, Appl
37 49 27.7 514 4 US-09-252-991A-22462 Sequence 22462, A
38 48.5 27.4 32 3 US-08-632-511A-6 Sequence 6, Appl
39 48.5 27.4 32 3 US-09-091-590A-12 Sequence 12, Appl
40 48.5 27.4 32 4 US-09-488-200-6 Sequence 6, Appl
41 48.5 27.4 36 1 US-08-117-080-2 Sequence 2, Appl
42 48.5 27.4 36 1 US-08-117-080-4 Sequence 2, Appl
43 48.5 27.4 36 1 US-08-471-329-4 Sequence 4, Appl
44 48.5 27.4 36 1 US-08-471-329-4 Sequence 4, Appl
45 48.5 27.4 36 2 US-08-915-142-2 Sequence 2, Appl

ALIGNMENTS

RESULT 1
US-08-682-485A-4
; Sequence 4, Application US/08682485A
; Patent No. 5763568
; GENERAL INFORMATION:
; APPLICANT: ATKINSON, RONALD K
; APPLICANT: HOWDEN, MERLIN E.H.
; APPLICANT: TYLER, MARGARET J
; APPLICANT: VONARX, EDWARD J
; TITLE OF INVENTION: Insecticidal Toxins Derived From
; TITLE OF INVENTION: Funnel Web (Atrax or Hadronycha Spiders)
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Zeneca, Inc.
; STREET: 1200 South 47th Street
; CITY: Richmond
; STATE: California
; COUNTRY: USA
; ZIP: 94804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/682,485A
; FILING DATE:
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/682,485
; FILING DATE: 17-JULY-1996
; APPLICATION NUMBER: US/08/256,933
; FILING DATE: 27-JULY-1994
; APPLICATION NUMBER: WO 93/15108
; FILING DATE: 29-JAN-1993
; APPLICATION NUMBER: AU PLO722
; FILING DATE: 31-JAN-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Shaw, Melissa A.
; REGISTRATION NUMBER: 38,301
; REFERENCE/POCKET NUMBER: PPD 5099/D1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 510-231-1542
; TELEFAX: 510-231-1112
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 37 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein

09/749637

;
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; ORIGINAL SOURCE:
; ORGANISM: Atrax robustus
; FEATURE:
; NAME/KEY: Modified-site
; LOCATION: 37
; OTHER INFORMATION: /label= a
; OTHER INFORMATION: /note= "this site may be amidated without loss
; OTHER INFORMATION: of biological activity"
; US-08-682-485A-4

Query Match 39.5%; Score 70; DB 1; Length 37;
Best Local Similarity 52.2%; Pred. No. 0.079;
Matches 12; Conservative 3; Mismatches 6; Indels 2; Gaps 1;

QY 4 CIPSGDLCFRSDHIGCCSGKCAF 26
||||| :||| :
Db 4 CIPSGQPCPYNEH--CCSGSCTY 24

RESULT 2
US-08-933-314-4
; Sequence 4, Application US/08933314
; Patent No. 5959182
; GENERAL INFORMATION:
; APPLICANT: ATKINSON, RONALD K
; APPLICANT: HOWDEN, MERLIN E.H.
; APPLICANT: TYLER, MARGARET J
; APPLICANT: VONARX, EDWARD J
; TITLE OF INVENTION: Insecticidal Toxins Derived From
; TITLE OF INVENTION: Funnel Web (Atrax or Hadronyche Spiders)
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Zeneca, Inc.
; STREET: 1200 South 47th Street
; CITY: Richmond
; STATE: California
; COUNTRY: USA
; ZIP: 94804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/933,314
; FILING DATE:
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/682,485
; FILING DATE: 17-JULY-1995
; APPLICATION NUMBER: US/08/256,933
; FILING DATE: 27-JULY-1994
; APPLICATION NUMBER: WO 93/15108
; FILING DATE: 29-JAN-1993
; APPLICATION NUMBER: AU PLO722
; FILING DATE: 31-JAN-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Shaw, Melissa A.
; REGISTRATION NUMBER: 38,301
; REFERENCE/DOCKET NUMBER: PPD 5099/D1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 510-231-1542
; TELEFAX: 510-231-1112
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 37 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHETICAL: NO
; ANTI-SENSE: NO

;
; ORIGINAL SOURCE:
; ORGANISM: Atrax robustus
; FEATURE:
; NAME/KEY: Modified-site
; LOCATION: 37
; OTHER INFORMATION: /label= a
; OTHER INFORMATION: /note= "this site may be amidated without loss
; OTHER INFORMATION: of biological activity"
; US-08-933-314-4

Query Match 39.5%; Score 70; DB 2; Length 37;
Best Local Similarity 52.2%; Pred. No. 0.079;
Matches 12; Conservative 3; Mismatches 6; Indels 2; Gaps 1;

QY 4 CIPSGDLCFRSDHIGCCSGKCAF 26
||||| :||| :
Db 4 CIPSGQPCPYNEH--CCSGSCTY 24

RESULT 3
US-07-689-693B-5
; Sequence 5, Application US/07689693B
; Patent No. 5231011
; GENERAL INFORMATION:
; APPLICANT: David Hillyard
; APPLICANT: Baldomero M. Olivera
; TITLE OF INVENTION: Segregated Folding Determinants
; TITLE OF INVENTION: for Small Disulfide-Rich Peptides
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Thorpe, No. 5231011ch & Western
; STREET: 9035 South 700 East, Suite 200
; CITY: Sandy
; STATE: Utah
; COUNTRY: USA
; ZIP: 84070
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.5 inch, 720 Kb storage
; COMPUTER: Compaq LTE/286
; OPERATING SYSTEM: DOS 4.01
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/689,693B
; FILING DATE: 19910418
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: none
; FILING DATE: na
; ATTORNEY/AGENT INFORMATION:
; NAME: Western, M. Wayne
; REGISTRATION NUMBER: 22,788
; REFERENCE/DOCKET NUMBER: 9925
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (801) 566-6633
; TELEFAX: (801) 566-0750
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 78 amino acids
; TYPE: AMINO ACID
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: Prepropeptide sequence for four loop
; NAME/KEY:
; IDENTIFICATION METHOD: Library was constructed
; IDENTIFICATION METHOD: using polyA selected mRNA transcripts purified
; IDENTIFICATION METHOD: from Conus textile venom duct tissue and cloned
; IDENTIFICATION METHOD: into the Okyama-Berg oligo-dT primed plasmid
; IDENTIFICATION METHOD: PSV7186.
; US-07-689-693B-5

Query Match 37.3%; Score 66; DB 1; Length 78;
Best Local Similarity 46.4%; Pred. No. 0.43;

Matches 13; Conservative 2; Mismatches 11; Indels 2; Gaps 2;

QY 2 RWCIPSGDLCFRSDHIGCCGKC-AFVC 28
||| |||:| | ||| ||
Db 51 RWCKQSGEMCNLLDQ-NCCDGYCIVLVC 77

RESULT 4

US-08-624-123-13
; Sequence 13, Application US/08624123
; Patent No. 5739276
; GENERAL INFORMATION:
; APPLICANT: Shon, Ki-Joon
; APPLICANT: Grille, Michelle M.
; APPLICANT: Olivera, Baldomero M.
; TITLE OF INVENTION: Conotoxin Peptides
; NUMBER OF SEQUENCES: 13
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Venable, Baetjer, Howard & Civiletti
; STREET: 1201 New York Avenue N.W.
; CITY: Washington
; STATE: DC
; COUNTRY: US
; ZIP: 20005
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/624,123
; FILING DATE:
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/319,554
; FILING DATE: 07-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/423,561
; FILING DATE: 17-APR-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Ihnen, Jeffrey L.
; REGISTRATION NUMBER: 28,957
; REFERENCE/DOCKET NUMBER: 24260-107674-5
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-962-4810
; TELEFAX: 202-962-8300
; INFORMATION FOR SEQ ID NO: 13:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 78 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHETICAL: NO

US-08-624-123-13
Query Match 37.3%; Score 66; DB 1; Length 78;
Best Local Similarity 46.4%; Pred. No. 0.43;
Matches 13; Conservative 2; Mismatches 11; Indels 2; Gaps 2;

QY 2 RWCIPSGDLCFRSDHIGCCGKC-AFVC 28
||| |||:| | ||| ||
Db 51 RWCKQSGEMCNLLDQ-NCCDGYCIVLVC 77

RESULT 5

US-08-716-308-2
; Sequence 2, Application US/08716308
; Patent No. 5885569
; GENERAL INFORMATION:
; APPLICANT: Windass, John D.
; TITLE OF INVENTION: Biological Insect Control Agent
; NUMBER OF SEQUENCES: 18

; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ZENECA Inc.
; STREET: 1800 Concord Pike
; CITY: Wilmington
; STATE: DE
; COUNTRY: USA
; ZIP: 19850
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/716,308
; FILING DATE: 24-SEP-1996
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/GB95/00677
; FILING DATE: 27-MAR-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: GB 9405951.6
; FILING DATE: 25-MAR-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Hohenschutz, Liza D.
; REGISTRATION NUMBER: 33,712
; REFERENCE/DOCKET NUMBER: PPD40027X/UST
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (302) 886-1699
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 78 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide

US-08-716-308-2
Query Match 37.3%; Score 66; DB 2; Length 78;
Best Local Similarity 46.4%; Pred. No. 0.43;
Matches 13; Conservative 2; Mismatches 11; Indels 2; Gaps 2;

QY 2 RWCIPSGDLCFRSDHIGCCGKC-AFVC 28
||| |||:| | ||| ||
Db 51 RWCKQSGEMCNLLDQ-NCCDGYCIVLVC 77

RESULT 6

US-08-716-308-16
; Sequence 16, Application US/08716308
; Patent No. 5885569
; GENERAL INFORMATION:
; APPLICANT: Windass, John D.
; TITLE OF INVENTION: Biological Insect Control Agent
; NUMBER OF SEQUENCES: 18
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ZENECA Inc.
; STREET: 1800 Concord Pike
; CITY: Wilmington
; STATE: DE
; COUNTRY: USA
; ZIP: 19850
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/716,308
; FILING DATE: 24-SEP-1996
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/GB95/00677
; FILING DATE: 27-MAR-1995
; PRIOR APPLICATION DATA:

US-08-716-308-16
Query Match 37.3%; Score 66; DB 2; Length 78;
Best Local Similarity 46.4%; Pred. No. 0.43;
Matches 13; Conservative 2; Mismatches 11; Indels 2; Gaps 2;

QY 2 RWCIPSGDLCFRSDHIGCCGKC-AFVC 28
||| |||:| | ||| ||
Db 51 RWCKQSGEMCNLLDQ-NCCDGYCIVLVC 77

APPLICATION NUMBER: GB 9405951.6
FILING DATE: 25-MAR-1994
ATTORNEY/AGENT INFORMATION:
NAME: Hohenschutz, Liza D.
REGISTRATION NUMBER: 33,712
REFERENCE/DOCKET NUMBER: PPD40027X/UST
TELEPHONE: (302) 886-1699
INFORMATION FOR SEQ ID NO: 16:
SEQUENCE CHARACTERISTICS:
LENGTH: 78 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-716-308-16

Query Match 37.3%; Score 66; DB 2; Length 78;
Best Local Similarity 46.4%; Pred. No. 0.43;
Matches 13; Conservative 2; Mismatches 11; Indels 2; Gaps 2;

QY 2 RWCIPIGDLCFRSDHIGCCSGKC-AFVC 28
Db 51 RWCKQSGEMCNLLDQ-NCCDGYCIVLVC 77

RESULT 7
PCT-US96-05262-14
Sequence 14: Application PC/TUS9605262
GENERAL INFORMATION:
APPLICANT: Shon, Ki-Joon
APPLICANT: Grille, Michelle M.
APPLICANT: Olivera, Baldomero M.
APPLICANT: Yoshikami, Doju
APPLICANT: Marsh, Warren
APPLICANT: Cruz, Lourdes J.
APPLICANT: Hillyard, David R.
TITLE OF INVENTION: Conotoxin Peptides
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
STREET: 1201 New York Avenue, N.W., Suite 1000
CITY: Washington
STATE: DC
COUNTRY: U.S.A.
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US96/05262
FILING DATE: 17-APR-1996
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/423,561
FILING DATE: 17-APR-1995
ATTORNEY/AGENT INFORMATION:
NAME: Saxe, Stephen A.
REGISTRATION NUMBER: 38,609
REFERENCE/DOCKET NUMBER: 24260-107674
TELEPHONE: 202-962-4848
TELEFAX: 202-962-8300
INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
LENGTH: 78 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: NO
PCT-US96-05262-14

APPLICATION NUMBER: GB 9405951.6
FILING DATE: 25-MAR-1994
ATTORNEY/AGENT INFORMATION:
NAME: Hohenschutz, Liza D.
REGISTRATION NUMBER: 33,712
REFERENCE/DOCKET NUMBER: PPD40027X/UST
TELEPHONE: (302) 886-1699
INFORMATION FOR SEQ ID NO: 16:
SEQUENCE CHARACTERISTICS:
LENGTH: 78 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-716-308-16

Query Match 37.3%; Score 66; DB 2; Length 78;
Best Local Similarity 46.4%; Pred. No. 0.43;
Matches 13; Conservative 2; Mismatches 11; Indels 2; Gaps 2;

QY 2 RWCIPIGDLCFRSDHIGCCSGKC-AFVC 28
Db 51 RWCKQSGEMCNLLDQ-NCCDGYCIVLVC 77

RESULT 7
PCT-US96-05262-14
Sequence 14: Application PC/TUS9605262
GENERAL INFORMATION:
APPLICANT: Shon, Ki-Joon
APPLICANT: Grille, Michelle M.
APPLICANT: Olivera, Baldomero M.
APPLICANT: Yoshikami, Doju
APPLICANT: Marsh, Warren
APPLICANT: Cruz, Lourdes J.
APPLICANT: Hillyard, David R.
TITLE OF INVENTION: Conotoxin Peptides
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
STREET: 1201 New York Avenue, N.W., Suite 1000
CITY: Washington
STATE: DC
COUNTRY: U.S.A.
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US96/05262
FILING DATE: 17-APR-1996
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/423,561
FILING DATE: 17-APR-1995
ATTORNEY/AGENT INFORMATION:
NAME: Saxe, Stephen A.
REGISTRATION NUMBER: 38,609
REFERENCE/DOCKET NUMBER: 24260-107674
TELEPHONE: 202-962-4848
TELEFAX: 202-962-8300
INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
LENGTH: 78 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: NO
PCT-US96-05262-14

APPLICATION NUMBER: GB 9405951.6
FILING DATE: 25-MAR-1994
ATTORNEY/AGENT INFORMATION:
NAME: Hohenschutz, Liza D.
REGISTRATION NUMBER: 33,712
REFERENCE/DOCKET NUMBER: PPD40027X/UST
TELEPHONE: (302) 886-1699
INFORMATION FOR SEQ ID NO: 16:
SEQUENCE CHARACTERISTICS:
LENGTH: 78 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-716-308-16

Query Match 37.3%; Score 66; DB 5; Length 78;
Best Local Similarity 46.4%; Pred. No. 0.43;
Matches 13; Conservative 2; Mismatches 11; Indels 2; Gaps 2;

QY 2 RWCIPIGDLCFRSDHIGCCSGKC-AFVC 28
Db 51 RWCKQSGEMCNLLDQ-NCCDGYCIVLVC 77

RESULT 8
US-07-689-693B-6
Sequence 6: Application US/07689693B
Patent No. 5231011
GENERAL INFORMATION:
APPLICANT: David Hillyard
APPLICANT: Baldomero M. Olivera
TITLE OF INVENTION: Segregated Folding Determinants
TITLE OF INVENTION: for Small Disulfide-Rich Peptides
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
ADDRESSEE: Thorpe, No. 5231011th & Western
STREET: 9035 South 700 East, Suite 200
CITY: Sandy
STATE: Utah
COUNTRY: USA
ZIP: 84070
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.5 inch, 720 Kb storage
COMPUTER: Compaq LTE/286
OPERATING SYSTEM: DOS 4.01
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/689,693B
FILING DATE: 19910418
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: none
FILING DATE: na
ATTORNEY/AGENT INFORMATION:
NAME: Western, M. Wayne
REGISTRATION NUMBER: 22,788
REFERENCE/DOCKET NUMBER: 9925
TELECOMMUNICATION INFORMATION:
TELEPHONE: (801) 566-8633
TELEFAX: (801) 566-0750
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 27 amino acids
TYPE: AMINO ACID
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
NAME/KEY: King Kong (kk0) conotoxin
IDENTIFICATION METHOD: Direct peptide sequencing
IDENTIFICATION METHOD: of purified Conus textile venom
US-07-689-693B-6

Query Match 34.5%; Score 61; DB 1; Length 27;
Best Local Similarity 44.4%; Pred. No. 0.66;
Matches 12; Conservative 2; Mismatches 11; Indels 2; Gaps 2;

QY 3 WCIPSGDLCFRSDHIGCCSGKC-AFVC 28
Db 1 WCKQSGEMCNLLDQ-NCCDGYCIVLVC 26

RESULT 9
US-08-682-485A-5
Sequence 5: Application US/08682485A
Patent No. 5763568
GENERAL INFORMATION:
APPLICANT: ATKINSON, RONALD K

APPLICANT: HOWDEN, MERLIN E.H.
APPLICANT: TYLER, MARGARET I
TITLE OF INVENTION: Insecticidal Toxins Derived From
Funnel Web (Atrax or Hadronyche Spiders)
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: Zeneca, Inc.
STREET: 1200 South 47th Street
CITY: Richmond
STATE: California
COUNTRY: USA
ZIP: 94804

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/682,485A
FILING DATE:
CLASSIFICATION: 424

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/682,485
FILING DATE: 17-JULY-1996
APPLICATION NUMBER: US/08/256,933
FILING DATE: 27-JULY-1994
APPLICATION NUMBER: WO 93/15108
FILING DATE: 29-JAN-1993
APPLICATION NUMBER: AU PLO722
FILING DATE: 31-JAN-1992
ATTORNEY/AGENT INFORMATION:
NAME: Shaw, Melissa A.
REGISTRATION NUMBER: 38,301
REFERENCE/DOCKET NUMBER: PPD 5099/D1

TELECOMMUNICATION INFORMATION:
TELEPHONE: 510-231-1542
TELEFAX: 510-231-1112
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 37 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Hadronyche versutus

FEATURE:
NAME/KEY: Modified-site
LOCATION: 37
OTHER INFORMATION: /label= a
OTHER INFORMATION: /note= "this site may be amidated without loss
of biological activity"
US-08-682-485A-5

Query Match 32.8%; Score 58; DB 1; Length 37;
Best Local Similarity 47.8%; Pred. No. 1.9;
Matches 11; Conservative 3; Mismatches 7; Indels 2; Gaps 1;

QY 4 CIPSGDLFRSDHIGCCSGKCAF 26
||||| : : :
DB 4 CIPSGQPCPYNEN--CCSQSCTF 24

RESULT 10
US-08-933-314-5
Sequence 5, Application US/08933314
Patent No. 5959182
GENERAL INFORMATION:
APPLICANT: ATKINSON, RONALD K
APPLICANT: HOWDEN, MERLIN E.H.
APPLICANT: TYLER, MARGARET I

APPLICANT: VONARX, EDWARD J
TITLE OF INVENTION: Insecticidal Toxins Derived From
Funnel Web (Atrax or Hadronyche Spiders)
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: Zeneca, Inc.
STREET: 1200 South 47th Street
CITY: Richmond
STATE: California
COUNTRY: USA
ZIP: 94804

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/933,314
FILING DATE:
CLASSIFICATION: 424

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/682,485
FILING DATE: 17-JULY-1996
APPLICATION NUMBER: US/08/256,933
FILING DATE: 27-JULY-1994
APPLICATION NUMBER: WO 93/15108
FILING DATE: 29-JAN-1993
APPLICATION NUMBER: AU PLO722
FILING DATE: 31-JAN-1992
ATTORNEY/AGENT INFORMATION:
NAME: Shaw, Melissa A.
REGISTRATION NUMBER: 38,301
REFERENCE/DOCKET NUMBER: PPD 5099/D1

TELECOMMUNICATION INFORMATION:
TELEPHONE: 510-231-1542
TELEFAX: 510-231-1112
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 37 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Hadronyche versutus

FEATURE:
NAME/KEY: Modified-site
LOCATION: 37
OTHER INFORMATION: /label= a
OTHER INFORMATION: /note= "this site may be amidated without loss
of biological activity"
US-08-933-314-5

Query Match 32.8%; Score 58; DB 2; Length 37;
Best Local Similarity 47.8%; Pred. No. 1.9;
Matches 11; Conservative 3; Mismatches 7; Indels 2; Gaps 1;

QY 4 CIPSGDLFRSDHIGCCSGKCAF 26
||||| : : :
DB 4 CIPSGQPCPYNEN--CCSQSCTF 24

RESULT 11
US-09-136-769A-5
Sequence 5, Application US/09136769A
Patent No. 6307014
GENERAL INFORMATION:
APPLICANT: Furie, Bruce
APPLICANT: Furie, Barbara
APPLICANT: Stenflo, Johan
APPLICANT: Rigby, Alan C.
APPLICANT: Roepstoft, Peter

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; TITLE OF INVENTION: CONOPEPTIDES
; FILE REFERENCE: 50065/002001
; CURRENT APPLICATION NUMBER: US/09/136.769A
; CURRENT FILING DATE: 1998-08-19
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 29
; TYPE: PRT
; ORGANISM: Conus textile
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: (4)...(4)
; OTHER INFORMATION: Xaa is gamma-carboxyglutamic acid
; US-09-136-769A-5

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Query Match          31.4%; Score 55.5; DB 4; Length 29;
Best Local Similarity 41.4%; Pred. No. 3;
Matches 12; Conservative 0; Mismatches 14; Indels 3; Gaps 1;

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QY 4 CIPSGDLCFRSD---HIGCCSGKCAFCVL 29
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Db 1 CIPXGSSCSSSGSCCHKSCCRWTCNQPC 29

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RESULT 12
US-09-136-769A-16
; Sequence 16, Application US/09136769A
; Patent No. 6307014
; GENERAL INFORMATION:
; APPLICANT: Furie, Bruce
; APPLICANT: Furie, Barbara
; APPLICANT: Stenflo, Johan
; APPLICANT: Rigby, Alan C.
; APPLICANT: Roepstoft, Peter
; TITLE OF INVENTION: CONOPEPTIDES
; FILE REFERENCE: 50065/002001
; CURRENT APPLICATION NUMBER: US/09/136.769A
; CURRENT FILING DATE: 1998-08-19
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 16
; LENGTH: 29
; TYPE: PRT
; ORGANISM: Conus textile
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: (4)...(4)
; OTHER INFORMATION: Xaa is gamma-carboxyglutamic acid.
; US-09-136-769A-16

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Query Match          31.4%; Score 55.5; DB 4; Length 29;
Best Local Similarity 41.4%; Pred. No. 3;
Matches 12; Conservative 0; Mismatches 14; Indels 3; Gaps 1;

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QY 4 CIPSGDLCFRSD---HIGCCSGKCAFCVL 29
||| | | | | | | | | | | | | | | | | | | |
Db 1 CIPXGSSCSSSGSCCHKSCCRWTCNQPC 29

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RESULT 13
US-08-682-485A-2
; Sequence 2, Application US/08682485A
; Patent No. 5763568
; GENERAL INFORMATION:
; APPLICANT: ATKINSON, RONALD K
; APPLICANT: HOWDEN, MERLIN E.H.
; APPLICANT: TYLER, MARGARET I
; APPLICANT: VONARX, EDWARD J
; TITLE OF INVENTION: Insecticidal Toxins Derived From
; FUNNEL WEB (Atrax or Hadronyche Spiders)
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Zeneca, Inc.
; STREET: 1200 South 47th Street

```

```

; ADDRESSEE: Zeneca, Inc.
; STREET: 1200 South 47th Street
; CITY: Richmond
; STATE: California
; COUNTRY: USA
; ZIP: 94804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/682,485A
; FILING DATE:
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/682,485
; FILING DATE: 17-JULY-1996
; APPLICATION NUMBER: US/08/256,933
; FILING DATE: 27-JULY-1994
; APPLICATION NUMBER: WO 93/15108
; FILING DATE: 29-JAN-1993
; APPLICATION NUMBER: AU PL0722
; FILING DATE: 31-JAN-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Shaw, Melissa A.
; REGISTRATION NUMBER: 38,301
; REFERENCE/DOCKET NUMBER: PPD 5099/D1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 510-231-1542
; TELEFAX: 510-231-1112
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 37 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; ORIGINAL SOURCE:
; ORGANISM: Atrax infensus
; FEATURE:
; NAME/KEY: Modified-site
; LOCATION: 37
; OTHER INFORMATION: /label= a
; OTHER INFORMATION: /note="this amino acid may be amidated without
; OTHER INFORMATION: loss of biological activity"
; US-08-682-485A-2

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Query Match          29.4%; Score 52; DB 1; Length 37;
Best Local Similarity 39.1%; Pred. No. 9; 3;
Matches 9; Conservative 5; Mismatches 7; Indels 2; Gaps 1;

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QY 4 CIPSGDLCFRSDHIGCCSGKCAFC 26
||| | | | | | | | | | | | | | | | | | | |
Db 4 CIPGQPCPYNEN--CCSQSCTY 24

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RESULT 14
US-08-933-314-2
; Sequence 2, Application US/08933314
; Patent No. 5959182
; GENERAL INFORMATION:
; APPLICANT: ATKINSON, RONALD K
; APPLICANT: HOWDEN, MERLIN E.H.
; APPLICANT: TYLER, MARGARET I
; APPLICANT: VONARX, EDWARD J
; TITLE OF INVENTION: Insecticidal Toxins Derived From
; FUNNEL WEB (Atrax or Hadronyche Spiders)
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Zeneca, Inc.
; STREET: 1200 South 47th Street

```


GenCore version 5.1.6

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OM protein - protein search, using sw model

Run on: November 17, 2003, 17:11:18 : Search time 24.8571 Seconds
(without alignment)
212.986 Million cell updates/sec

Title: US-09-749-637A-270

Perfect score: 177

Sequence: 1 LRWCIPSGDLFRSDHICCSGKCAFVCL 29

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 666188 seqs, 182559486 residues

Total number of hits satisfying chosen parameters: 666188

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database:

Published Applications AA:*

- 1: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep.*
- 2: /cgn2_6/ptodata/2/pubpaa/FCI_NEW_PUB.pep.*
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- 8: /cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep.*
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- 11: /cgn2_6/ptodata/2/pubpaa/US09C_PUBCOMB.pep.*
- 12: /cgn2_6/ptodata/2/pubpaa/US09A_NEW_PUB.pep.*
- 13: /cgn2_6/ptodata/2/pubpaa/US10A_PUBCOMB.pep.*
- 14: /cgn2_6/ptodata/2/pubpaa/US10B_PUBCOMB.pep.*
- 15: /cgn2_6/ptodata/2/pubpaa/US10C_PUBCOMB.pep.*
- 16: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep.*
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- 18: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
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2	173	97.7	29	10	US-09-749-637A-267
3	169	95.5	29	10	US-09-749-637A-273
4	159	89.8	82	10	US-09-749-637A-393
5	150	84.7	31	10	US-09-749-637A-369
6	150	84.7	31	10	US-09-749-637A-378
7	148	83.6	27	10	US-09-749-637A-271
8	148	83.6	29	10	US-09-749-637A-268
9	147	83.1	31	10	US-09-749-637A-384
10	147	83.1	31	10	US-09-749-637A-387
11	143	80.8	29	10	US-09-749-637A-345
12	140	79.1	27	10	US-09-749-637A-274
13	136	76.8	31	10	US-09-749-637A-372
14	135	76.3	29	10	US-09-749-637A-348
15	133	75.1	31	10	US-09-749-637A-366
					Sequence 270, App
					Sequence 267, App
					Sequence 273, App
					Sequence 393, App
					Sequence 369, App
					Sequence 378, App
					Sequence 271, App
					Sequence 268, App
					Sequence 384, App
					Sequence 387, App
					Sequence 345, App
					Sequence 274, App
					Sequence 372, App
					Sequence 348, App
					Sequence 366, App

Sequence 276, App
Sequence 375, App
Sequence 381, App
Sequence 373, App
Sequence 370, App
Sequence 367, App
Sequence 385, App
Sequence 388, App
Sequence 382, App
Sequence 376, App
Sequence 394, App
Sequence 346, App
Sequence 349, App
Sequence 277, App
Sequence 286, App
Sequence 288, App
Sequence 22, Appl
Sequence 26, Appl
Sequence 30, Appl
Sequence 33, Appl
Sequence 354, App
Sequence 301, App
Sequence 306, App
Sequence 333, App
Sequence 297, App
Sequence 252, App
Sequence 285, App
Sequence 324, App
Sequence 307, App

ALIGNMENTS

RESULT 1
US-09-749-637A-270
; Sequence 270, Application US/09749637A
; Patent No. US20020173449A1
; GENERAL INFORMATION:
; APPLICANT: University of Utah Research Foundation
; APPLICANT: Cognetix, Inc.
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: Cartier, G. Edward
; APPLICANT: Watkins, Maren
; APPLICANT: Hillyard, David R.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Laver, Richard T.
; APPLICANT: Jones, Robert M.
; TITLE OF INVENTION: O-Superfamily Conotoxin Peptides
; FILE REFERENCE: 2314-227
; CURRENT APPLICATION NUMBER: US/09/749,637A
; CURRENT FILING DATE: 2000-12-28
; PRIOR APPLICATION NUMBER: US 60/243,412
; PRIOR FILING DATE: 2000-10-27
; PRIOR APPLICATION NUMBER: US60/219,440
; PRIOR FILING DATE: 2000-07-20
; PRIOR APPLICATION NUMBER: US 60/214,263
; PRIOR FILING DATE: 2000-06-26
; PRIOR APPLICATION NUMBER: US 60/173,754
; PRIOR FILING DATE: 1999-12-30
; NUMBER OF SEQ ID NOS: 409
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 270
; LENGTH: 29
; TYPE: PRT
; ORGANISM: Conus striatus
US-09-749-637A-270

Query Match 100.0%; Score 177; DB 10; Length 29;
Best Local Similarity 100.0%; Pred. No. 5.4e-15;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LRMCPGDLCPFRSDHIGCCSGKCAFPVCL 29
 Db 1 LRMCPGDLCPFRSDHIGCCSGKCAFPVCL 29

RESULT 2

US-09-749-637A-267
 ; Sequence 267, Application US/09749637A
 ; Patent No. US20020173449A1
 ; GENERAL INFORMATION:
 ; APPLICANT: University of Utah Research Foundation
 ; APPLICANT: Cognetix, Inc.
 ; APPLICANT: Olivera, Baldomero M.
 ; APPLICANT: Cartier, G. Edward
 ; APPLICANT: Watkins, Maren
 ; APPLICANT: Hillyard, David R.
 ; APPLICANT: McIntosh, J. Michael
 ; APPLICANT: Laver, Richard T.
 ; APPLICANT: Jones, Robert M.
 ; TITLE OF INVENTION: O-Superfamily Conotoxin Peptides
 ; FILE REFERENCE: 2314-227
 ; CURRENT APPLICATION NUMBER: US/09/749,637A
 ; CURRENT FILING DATE: 2000-12-28
 ; PRIOR APPLICATION NUMBER: US 60/243,412
 ; PRIOR FILING DATE: 2000-10-27
 ; PRIOR APPLICATION NUMBER: US60/219,440
 ; PRIOR FILING DATE: 2000-07-20
 ; PRIOR APPLICATION NUMBER: US 60/214,263
 ; PRIOR FILING DATE: 2000-06-26
 ; PRIOR APPLICATION NUMBER: US 60/173,754
 ; PRIOR FILING DATE: 1999-12-30
 ; NUMBER OF SEQ ID NOS: 409
 ; SOFTWARE: Patent in version 3.0
 ; SEQ ID NO 267
 ; LENGTH: 29
 ; TYPE: PRT
 ; ORGANISM: Conus striatus
 US-09-749-637A-267

Query Match 97.7%; Score 173; DB 10; Length 29;
 Best Local Similarity 96.6%; Pred. No. 1.7e-14;
 Matches 28; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 LRMCPGDLCPFRSDHIGCCSGKCAFPVCL 29
 Db 1 LRMCPGDLCPFRSDHIGCCSGKCAFPVCL 29

RESULT 3

US-09-749-637A-273
 ; Sequence 273, Application US/09749637A
 ; Patent No. US20020173449A1
 ; GENERAL INFORMATION:
 ; APPLICANT: University of Utah Research Foundation
 ; APPLICANT: Cognetix, Inc.
 ; APPLICANT: Olivera, Baldomero M.
 ; APPLICANT: Cartier, G. Edward
 ; APPLICANT: Watkins, Maren
 ; APPLICANT: Hillyard, David R.
 ; APPLICANT: McIntosh, J. Michael
 ; APPLICANT: Laver, Richard T.
 ; APPLICANT: Jones, Robert M.
 ; TITLE OF INVENTION: O-Superfamily Conotoxin Peptides
 ; FILE REFERENCE: 2314-227
 ; CURRENT APPLICATION NUMBER: US/09/749,637A
 ; CURRENT FILING DATE: 2000-12-28
 ; PRIOR APPLICATION NUMBER: US 60/243,412
 ; PRIOR FILING DATE: 2000-10-27
 ; PRIOR APPLICATION NUMBER: US60/219,440
 ; PRIOR FILING DATE: 2000-07-20
 ; PRIOR APPLICATION NUMBER: US 60/214,263
 ; PRIOR FILING DATE: 2000-06-26
 ; PRIOR APPLICATION NUMBER: US 60/173,754

; PRIOR FILING DATE: 1999-12-30
 ; NUMBER OF SEQ ID NOS: 409
 ; SOFTWARE: Patent in version 3.0
 ; SEQ ID NO 273
 ; LENGTH: 29
 ; TYPE: PRT
 ; ORGANISM: Conus striatus
 US-09-749-637A-273

Query Match 95.5%; Score 169; DB 10; Length 29;
 Best Local Similarity 96.6%; Pred. No. 5.1e-14;
 Matches 28; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 LRMCPGDLCPFRSDHIGCCSGKCAFPVCL 29
 Db 1 LRMCPGDLCPFRSDHIGCCSGKCAFPVCL 29

RESULT 4

US-09-749-637A-393
 ; Sequence 393, Application US/09749637A
 ; Patent No. US20020173449A1
 ; GENERAL INFORMATION:
 ; APPLICANT: University of Utah Research Foundation
 ; APPLICANT: Cognetix, Inc.
 ; APPLICANT: Olivera, Baldomero M.
 ; APPLICANT: Cartier, G. Edward
 ; APPLICANT: Watkins, Maren
 ; APPLICANT: Hillyard, David R.
 ; APPLICANT: McIntosh, J. Michael
 ; APPLICANT: Laver, Richard T.
 ; APPLICANT: Jones, Robert M.
 ; TITLE OF INVENTION: O-Superfamily Conotoxin Peptides
 ; FILE REFERENCE: 2314-227
 ; CURRENT APPLICATION NUMBER: US/09/749,637A
 ; CURRENT FILING DATE: 2000-12-28
 ; PRIOR APPLICATION NUMBER: US 60/243,412
 ; PRIOR FILING DATE: 2000-10-27
 ; PRIOR APPLICATION NUMBER: US60/219,440
 ; PRIOR FILING DATE: 2000-07-20
 ; PRIOR APPLICATION NUMBER: US 60/214,263
 ; PRIOR FILING DATE: 2000-06-26
 ; PRIOR APPLICATION NUMBER: US 60/173,754
 ; PRIOR FILING DATE: 1999-12-30
 ; NUMBER OF SEQ ID NOS: 409
 ; SOFTWARE: Patent in version 3.0
 ; SEQ ID NO 393
 ; LENGTH: 82
 ; TYPE: PRT
 ; ORGANISM: Conus stercusmuscarum
 US-09-749-637A-393

Query Match 89.8%; Score 159; DB 10; Length 82;
 Best Local Similarity 89.7%; Pred. No. 2.1e-12;
 Matches 26; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 LRMCPGDLCPFRSDHIGCCSGKCAFPVCL 29
 Db 54 LRMCPGDLCPFRSDHIGCCSGKCAFPVCL 82

RESULT 5

US-09-749-637A-369
 ; Sequence 369, Application US/09749637A
 ; Patent No. US20020173449A1
 ; GENERAL INFORMATION:
 ; APPLICANT: University of Utah Research Foundation
 ; APPLICANT: Cognetix, Inc.
 ; APPLICANT: Olivera, Baldomero M.
 ; APPLICANT: Cartier, G. Edward
 ; APPLICANT: Watkins, Maren
 ; APPLICANT: Hillyard, David R.
 ; APPLICANT: McIntosh, J. Michael

APPLICANT: Layer, Richard T.
APPLICANT: Jones, Robert M.
TITLE OF INVENTION: O-Superfamily Conotoxin Peptides
FILE REFERENCE: 2314-227
CURRENT APPLICATION NUMBER: US/09/749,637A
CURRENT FILING DATE: 2000-12-28
PRIOR APPLICATION NUMBER: US 60/243,412
PRIOR FILING DATE: 2000-10-27
PRIOR APPLICATION NUMBER: US60/219,440
PRIOR FILING DATE: 2000-07-20
PRIOR APPLICATION NUMBER: US 60/214,263
PRIOR FILING DATE: 2000-06-26
PRIOR APPLICATION NUMBER: US 60/173,754
PRIOR FILING DATE: 1999-12-30
NUMBER OF SEQ ID NOS: 409
SOFTWARE: Patent in version 3.0
SEQ ID NO 369
LENGTH: 31
TYPE: PRT
ORGANISM: Conus circumcinctus
US-09-749-637A-369

Query Match 84.7%; Score 150; DB 10; Length 31;
Best Local Similarity 86.2%; Pred. No. 1.2e-11;
Matches 25; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 LRWCIPSGDLCPFRSDHIGCCSGKCAFPVCL 29
DB 3 LSWCIPSGDLCPFRSDHIGCCSGKCAFPVCL 31

RESULT 6

US-09-749-637A-378
Sequence 378, Application US/09749637A
Patent No. US20020173449A1
GENERAL INFORMATION:
APPLICANT: University of Utah Research Foundation
APPLICANT: Cognetix, Inc.
APPLICANT: Olivera, Baldomero M.
APPLICANT: Cartier, G. Edward
APPLICANT: Watkins, Maren
APPLICANT: Hillyard, David R.
APPLICANT: McIntosh, J. Michael
APPLICANT: Layer, Richard T.
APPLICANT: Jones, Robert M.
TITLE OF INVENTION: O-Superfamily Conotoxin Peptides
FILE REFERENCE: 2314-227
CURRENT APPLICATION NUMBER: US/09/749,637A
CURRENT FILING DATE: 2000-12-28
PRIOR APPLICATION NUMBER: US 60/243,412
PRIOR FILING DATE: 2000-10-27
PRIOR APPLICATION NUMBER: US60/219,440
PRIOR FILING DATE: 2000-07-20
PRIOR APPLICATION NUMBER: US 60/214,263
PRIOR FILING DATE: 2000-06-26
PRIOR APPLICATION NUMBER: US 60/173,754
PRIOR FILING DATE: 1999-12-30
NUMBER OF SEQ ID NOS: 409
SOFTWARE: Patent in version 3.0
SEQ ID NO 378
LENGTH: 31
TYPE: PRT
ORGANISM: Conus circumcinctus
US-09-749-637A-378

Query Match 84.7%; Score 150; DB 10; Length 31;
Best Local Similarity 86.2%; Pred. No. 1.2e-11;
Matches 25; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 LRWCIPSGDLCPFRSDHIGCCSGKCAFPVCL 29
DB 3 LSWCIPSGDLCPFRSDHIGCCSGKCAFPVCL 31

RESULT 7

US-09-749-637A-271
Sequence 271, Application US/09749637A
Patent No. US20020173449A1
GENERAL INFORMATION:
APPLICANT: University of Utah Research Foundation
APPLICANT: Cognetix, Inc.
APPLICANT: Olivera, Baldomero M.
APPLICANT: Cartier, G. Edward
APPLICANT: Watkins, Maren
APPLICANT: Hillyard, David R.
APPLICANT: McIntosh, J. Michael
APPLICANT: Layer, Richard T.
APPLICANT: Jones, Robert M.
TITLE OF INVENTION: O-Superfamily Conotoxin Peptides
FILE REFERENCE: 2314-227
CURRENT APPLICATION NUMBER: US/09/749,637A
CURRENT FILING DATE: 2000-12-28
PRIOR APPLICATION NUMBER: US 60/243,412
PRIOR FILING DATE: 2000-10-27
PRIOR APPLICATION NUMBER: US60/219,440
PRIOR FILING DATE: 2000-07-20
PRIOR APPLICATION NUMBER: US 60/214,263
PRIOR FILING DATE: 2000-06-26
PRIOR APPLICATION NUMBER: US 60/173,754
PRIOR FILING DATE: 1999-12-30
NUMBER OF SEQ ID NOS: 409
SOFTWARE: Patent in version 3.0
SEQ ID NO 271
LENGTH: 27
TYPE: PRT
ORGANISM: Conus striatus
NAME/KEY: SITE
LOCATION: (1)..(27)
OTHER INFORMATION: Xaa at residue 1 may be Trp or bromo-Trp; Xaa at residue 4 may be Pro or hydroxy-Pro
US-09-749-637A-271

Query Match 83.6%; Score 148; DB 10; Length 27;
Best Local Similarity 96.2%; Pred. No. 1.8e-11;
Matches 25; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4 CIPSGDLCPFRSDHIGCCSGKCAFPVCL 29
DB 2 CIXSGDLCPFRSDHIGCCSGKCAFPVCL 27

RESULT 8

US-09-749-637A-268
Sequence 268, Application US/09749637A
Patent No. US20020173449A1
GENERAL INFORMATION:
APPLICANT: University of Utah Research Foundation
APPLICANT: Cognetix, Inc.
APPLICANT: Olivera, Baldomero M.
APPLICANT: Cartier, G. Edward
APPLICANT: Watkins, Maren
APPLICANT: Hillyard, David R.
APPLICANT: McIntosh, J. Michael
APPLICANT: Layer, Richard T.
APPLICANT: Jones, Robert M.
TITLE OF INVENTION: O-Superfamily Conotoxin Peptides
FILE REFERENCE: 2314-227
CURRENT APPLICATION NUMBER: US/09/749,637A
CURRENT FILING DATE: 2000-12-28
PRIOR APPLICATION NUMBER: US 60/243,412
PRIOR FILING DATE: 2000-10-27
PRIOR APPLICATION NUMBER: US60/219,440
PRIOR FILING DATE: 2000-07-20
PRIOR APPLICATION NUMBER: US 60/214,263
PRIOR FILING DATE: 2000-06-26

; PRIOR APPLICATION NUMBER: US 60/173,754
; PRIOR FILING DATE: 1999-12-30
; NUMBER OF SEQ ID NOS: 409
; SOFTWARE: Patent in version 3.0
; SEQ ID NO 286
; LENGTH: 29
; TYPE: PRT
; ORGANISM: Conus striatus
; NAME/KEY: SITE
; LOCATION: (1) (29)
; OTHER INFORMATION: Xaa at residue3 may be Trp or bromo-Trp; Xaa at residue 6 may be
; OTHER INFORMATION: Pro or hydroxy-Pro; Xaa at residue 9 may be Glu or gamma-carboxy
; OTHER INFORMATION: -Glu
US-09-749-637A-268

Query Match 83.6%; Score 148; DB 10; Length 29;
Best Local Similarity 89.7%; Pred. No. 1.9e-11;
Matches 26; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 LRWCIPSGDLCFRSDHIGCCSGKCAFYCL 29
DB 1 LRXCIXSGXLCFRSDHIGCCSGKCAFYCL 29

RESULT 9

US-09-749-637A-384
; Sequence 384, Application US/09749637A
; Patent No. US20020173449A1
; GENERAL INFORMATION:
; APPLICANT: University of Utah Research Foundation
; APPLICANT: Cognetix, Inc.
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: Cartier, G. Edward
; APPLICANT: Watkins, Maren
; APPLICANT: Hillyard, David R.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Layer, Robert M.
; APPLICANT: Jones, Robert M.
; TITLE OF INVENTION: O-Superfamily Conotoxin Peptides
; FILE REFERENCE: 2314-227
; CURRENT APPLICATION NUMBER: US/09/749,637A
; CURRENT FILING DATE: 2000-12-28
; PRIOR FILING DATE: 2000-10-27
; PRIOR APPLICATION NUMBER: US60/219,440
; PRIOR FILING DATE: 2000-07-20
; PRIOR FILING DATE: 2000-06-26
; PRIOR FILING DATE: 2000-06-26
; PRIOR FILING DATE: 1999-12-30
; NUMBER OF SEQ ID NOS: 409
; SOFTWARE: Patent in version 3.0
; SEQ ID NO 384
; LENGTH: 31
; TYPE: PRT
; ORGANISM: Conus circumcissus
US-09-749-637A-384

Query Match 83.1%; Score 147; DB 10; Length 31;
Best Local Similarity 82.8%; Pred. No. 2.7e-11;
Matches 24; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

QY 1 LRWCIPSGDLCFRSDHIGCCSGKCAFYCL 29
DB 3 LSWCIPSGDLCFRSDHIGCCSGKCAFYCL 31

RESULT 10

US-09-749-637A-387
; Sequence 387, Application US/09749637A
; Patent No. US20020173449A1
; GENERAL INFORMATION:

; APPLICANT: University of Utah Research Foundation
; APPLICANT: Cognetix, Inc.
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: Cartier, G. Edward
; APPLICANT: Watkins, Maren
; APPLICANT: Hillyard, David R.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Layer, Robert M.
; APPLICANT: Jones, Robert M.
; TITLE OF INVENTION: O-Superfamily Conotoxin Peptides
; FILE REFERENCE: 2314-227
; CURRENT APPLICATION NUMBER: US/09/749,637A
; CURRENT FILING DATE: 2000-12-28
; PRIOR FILING DATE: 2000-10-27
; PRIOR APPLICATION NUMBER: US60/219,440
; PRIOR FILING DATE: 2000-07-20
; PRIOR FILING DATE: 2000-06-26
; PRIOR FILING DATE: 2000-06-26
; PRIOR FILING DATE: 1999-12-30
; NUMBER OF SEQ ID NOS: 409
; SOFTWARE: Patent in version 3.0
; SEQ ID NO 387
; LENGTH: 31
; TYPE: PRT
; ORGANISM: Conus circumcissus
US-09-749-637A-387

Query Match 83.1%; Score 147; DB 10; Length 31;
Best Local Similarity 79.3%; Pred. No. 2.7e-11;
Matches 23; Conservative 2; Mismatches 4; Indels 0; Gaps 0;

QY 1 LRWCIPSGDLCFRSDHIGCCSGKCAFYCL 29
DB 3 LSWCIPSGDLCFRSDHIGCCSGKCAFYCL 31

RESULT 11

US-09-749-637A-345
; Sequence 345, Application US/09749637A
; Patent No. US20020173449A1
; GENERAL INFORMATION:
; APPLICANT: University of Utah Research Foundation
; APPLICANT: Cognetix, Inc.
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: Cartier, G. Edward
; APPLICANT: Watkins, Maren
; APPLICANT: Hillyard, David R.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Layer, Robert M.
; APPLICANT: Jones, Robert M.
; TITLE OF INVENTION: O-Superfamily Conotoxin Peptides
; FILE REFERENCE: 2314-227
; CURRENT APPLICATION NUMBER: US/09/749,637A
; CURRENT FILING DATE: 2000-12-28
; PRIOR FILING DATE: 2000-10-27
; PRIOR APPLICATION NUMBER: US60/219,440
; PRIOR FILING DATE: 2000-07-20
; PRIOR FILING DATE: 2000-06-26
; PRIOR FILING DATE: 2000-06-26
; PRIOR FILING DATE: 1999-12-30
; NUMBER OF SEQ ID NOS: 409
; SOFTWARE: Patent in version 3.0
; SEQ ID NO 345
; LENGTH: 29
; TYPE: PRT
; ORGANISM: Conus achatinus
US-09-749-637A-345

Query Match 80.8%; Score 143; DB 10; Length 29;

```

; CURRENT FILING DATE: 2000-12-28
; PRIOR APPLICATION NUMBER: US 60/243,412
; PRIOR FILING DATE: 2000-10-27
; PRIOR APPLICATION NUMBER: US60/219,440
; PRIOR FILING DATE: 2000-07-20
; PRIOR APPLICATION NUMBER: US 60/214,263
; PRIOR FILING DATE: 2000-06-26
; PRIOR APPLICATION NUMBER: US 60/173,754
; PRIOR FILING DATE: 1999-12-30
; NUMBER OF SEQ ID NOS: 409
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 372
; LENGTH: 31
; TYPE: PRT
; ORGANISM: Conus circumcissus
US-09-749-637A-372

Query Match 76.8%; Score 136; DB 10; Length 31;
Best Local Similarity 88.5%; Pred. No. 5.9e-10;
Matches 23; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 4 CIPSGDLCFRSDHIGCCSGKCAFVCL 29
||||| ||||| ||||| |||||
DB 6 CIPSGDLCFRSDHIGCCSAKCAFVCL 31

RESULT 14
US-09-749-637A-348
; Sequence 348, Application US/09749637A
; Patent No. US20020173449A1
; GENERAL INFORMATION:
; APPLICANT: University of Utah Research Foundation
; APPLICANT: Cognetix, Inc.
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: Cartier, G. Edward
; APPLICANT: Watkins, Maren
; APPLICANT: Hilliard, David R.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Layer, Richard T.
; APPLICANT: Jones, Robert M.
; TITLE OF INVENTION: O-Superfamily Conotoxin Peptides
; FILE REFERENCE: 2314-227
; CURRENT APPLICATION NUMBER: US/09/749,637A
; CURRENT FILING DATE: 2000-12-28
; PRIOR APPLICATION NUMBER: US 60/243,412
; PRIOR FILING DATE: 2000-10-27
; PRIOR APPLICATION NUMBER: US60/219,440
; PRIOR FILING DATE: 2000-07-20
; PRIOR APPLICATION NUMBER: US 60/214,263
; PRIOR FILING DATE: 2000-06-26
; PRIOR APPLICATION NUMBER: US 60/173,754
; PRIOR FILING DATE: 1999-12-30
; NUMBER OF SEQ ID NOS: 409
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 348
; LENGTH: 29
; TYPE: PRT
; ORGANISM: Conus achatinus
US-09-749-637A-348

Query Match 76.3%; Score 135; DB 10; Length 29;
Best Local Similarity 69.0%; Pred. No. 7.4e-10;
Matches 20; Conservative 5; Mismatches 4; Indels 0; Gaps 0;

QY 1 LRWCIPSGDLCFRSDHIGCCSGKCAFVCL 29
||||| .: ||||| |||||
DB 1 LRGCVPSEICYPFMDHIGCCSGKCTFVCM 29

RESULT 15
US-09-749-637A-366
; Sequence 366, Application US/09749637A
; Patent No. US20020173449A1

```

/ GENERAL INFORMATION:
/ APPLICANT: University of Utah Research Foundation
/ APPLICANT: Cognetix, Inc.
/ APPLICANT: Olivera, Baldozero M.
/ APPLICANT: Cartier, G. Edward
/ APPLICANT: Watkins, Maren
/ APPLICANT: Hillyard, David R.
/ APPLICANT: McIntosh, J. Michael
/ APPLICANT: Laver, Richard T.
/ APPLICANT: Jones, Robert M.
/ TITLE OF INVENTION: O-Superfamily Conotoxin Peptides
/ FILE REFERENCE: 2314-227
/ CURRENT APPLICATION NUMBER: US/09/749,637A
/ CURRENT FILING DATE: 2000-12-28
/ PRIOR APPLICATION NUMBER: US 60/243,412
/ PRIOR FILING DATE: 2000-10-27
/ PRIOR APPLICATION NUMBER: US60/219,440
/ PRIOR FILING DATE: 2000-07-20
/ PRIOR APPLICATION NUMBER: US 60/214,263
/ PRIOR FILING DATE: 2000-06-26
/ PRIOR APPLICATION NUMBER: US 60/173,754
/ PRIOR FILING DATE: 1999-12-30
/ NUMBER OF SEQ ID NOS: 409
/ SOFTWARE: PatentIn version 3.0
/ SEQ ID NO 366
/ LENGTH: 31
/ TYPE: PRT
/ ORGANISM: Conus circumcissus
US-09-749-637A-366

Query Match 75.1%; Score 133; DB 10; Length 31;
Best Local Similarity 84.6%; Pred. NO. 1.4e-09;
Matches 22; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

OY 4 CIPSGDLGFRSDHIGCCSGKCAFYCL 29
Db 6 CIPSGDLGFRSDHIGCCSGKCAFYCL 31

Search completed: November 17, 2003, 17:19:22
Job time : 25.8571 secs

Query Match 98.0%; Score 149; DB 10; Length 27;
Best Local Similarity 100.0%; Pred. No. 1e-11;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 CIXSGDLFRSDHIGCCSGKCAVCL 27
|||||
Db 2 CIXSGDLFRSDHIGCCSGKCAVCL 27

RESULT 2

US-09-749-637A-270
; Sequence 270, Application US/09749637A
; Patent No. US20020173449A1
; GENERAL INFORMATION:
; APPLICANT: University of Utah Research Foundation
; APPLICANT: Cognetix, Inc.
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: Cartier, G. Edward
; APPLICANT: Watkins, Maren
; APPLICANT: Hillyard, David R.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Layer, Richard T.
; APPLICANT: Jones, Robert M.
; TITLE OF INVENTION: O-Superfamily Conotoxin Peptides
; FILE REFERENCE: 2314-227
; CURRENT APPLICATION NUMBER: US/09/749,637A
; CURRENT FILING DATE: 2000-12-28
; PRIOR APPLICATION NUMBER: US 60/243,412
; PRIOR FILING DATE: 2000-10-27
; PRIOR APPLICATION NUMBER: US60/219,440
; PRIOR FILING DATE: 2000-07-20
; PRIOR APPLICATION NUMBER: US 60/214,263
; PRIOR FILING DATE: 2000-06-26
; PRIOR APPLICATION NUMBER: US 60/173,754
; PRIOR FILING DATE: 1999-12-30
; NUMBER OF SEQ ID NOS: 409
; SOFTWARE: Patent in version 3.0
; SEQ ID NO 270
; LENGTH: 29
; TYPE: PRT
; ORGANISM: Conus striatus
US-09-749-637A-270

Query Match 97.4%; Score 148; DB 10; Length 29;
Best Local Similarity 96.2%; Pred. No. 1.4e-11;
Matches 25; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 CIXSGDLFRSDHIGCCSGKCAVCL 27
|||||
Db 4 CIPSGDLFRSDHIGCCSGKCAVCL 29

RESULT 3

US-09-749-637A-267
; Sequence 267, Application US/09749637A
; Patent No. US20020173449A1
; GENERAL INFORMATION:
; APPLICANT: University of Utah Research Foundation
; APPLICANT: Cognetix, Inc.
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: Cartier, G. Edward
; APPLICANT: Watkins, Maren
; APPLICANT: Hillyard, David R.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Layer, Richard T.
; APPLICANT: Jones, Robert M.
; TITLE OF INVENTION: O-Superfamily Conotoxin Peptides
; FILE REFERENCE: 2314-227
; CURRENT APPLICATION NUMBER: US/09/749,637A
; CURRENT FILING DATE: 2000-12-28
; PRIOR APPLICATION NUMBER: US 60/243,412
; PRIOR FILING DATE: 2000-10-27

; PRIOR APPLICATION NUMBER: US60/219,440
; PRIOR FILING DATE: 2000-07-20
; PRIOR APPLICATION NUMBER: US 60/214,263
; PRIOR FILING DATE: 2000-06-26
; PRIOR APPLICATION NUMBER: US 60/173,754
; PRIOR FILING DATE: 1999-12-30
; NUMBER OF SEQ ID NOS: 409
; SOFTWARE: Patent in version 3.0
; SEQ ID NO 267
; LENGTH: 29
; TYPE: PRT
; ORGANISM: Conus striatus
US-09-749-637A-267

Query Match 94.7%; Score 144; DB 10; Length 29;
Best Local Similarity 92.3%; Pred. No. 4.4e-11;
Matches 24; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 2 CIXSGDLFRSDHIGCCSGKCAVCL 27
|||||
Db 4 CIPSGDLFRSDHIGCCSGKCAVCL 29

RESULT 4

US-09-749-637A-268
; Sequence 268, Application US/09749637A
; Patent No. US20020173449A1
; GENERAL INFORMATION:
; APPLICANT: University of Utah Research Foundation
; APPLICANT: Cognetix, Inc.
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: Cartier, G. Edward
; APPLICANT: Watkins, Maren
; APPLICANT: Hillyard, David R.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Layer, Richard T.
; APPLICANT: Jones, Robert M.
; TITLE OF INVENTION: O-Superfamily Conotoxin Peptides
; FILE REFERENCE: 2314-227
; CURRENT APPLICATION NUMBER: US/09/749,637A
; CURRENT FILING DATE: 2000-12-28
; PRIOR APPLICATION NUMBER: US 60/243,412
; PRIOR FILING DATE: 2000-10-27
; PRIOR APPLICATION NUMBER: US60/219,440
; PRIOR FILING DATE: 2000-07-20
; PRIOR APPLICATION NUMBER: US 60/214,263
; PRIOR FILING DATE: 2000-06-26
; PRIOR APPLICATION NUMBER: US 60/173,754
; PRIOR FILING DATE: 1999-12-30
; NUMBER OF SEQ ID NOS: 409
; SOFTWARE: Patent in version 3.0
; SEQ ID NO 268
; LENGTH: 29
; TYPE: PRT
; ORGANISM: Conus striatus
US-09-749-637A-268

RESULT 5

Query Match 93.4%; Score 142; DB 10; Length 29;
Best Local Similarity 96.2%; Pred. No. 7.7e-11;
Matches 25; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 CIXSGDLFRSDHIGCCSGKCAVCL 27
|||||
Db 4 CIXSGDLFRSDHIGCCSGKCAVCL 29

ug-09-749-637a-271.rapp

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; NUMBER OF SEQ ID NOS: 409
; SOFTWARE: Patentin version 3.0
; SEQ ID NO 273
; LENGTH: 29
; TYPE: PRT
; ORGANISM: Conus striatus
US-09-749-637A-273

Query Match          92.1%; Score 140; DB 10; Length 29;
Best Local Similarity 92.3%; Pred. No. 1.4e-10;
Matches 24; Conservative 0; Mismatches 2; Indels 0; Gaps 0

QY      2 CIXSGDLCFRSDHIGCCSGKCAFVCL 27
DB      4 CIPSGDLCFRSDHIGCCSGKCAFVCL 29
      |||||||||||||||||||||||
      |||||||||||||||||||||||

RESULT 7
US-09-749-637A-393
; Sequence 393, Application US/09749637A
; Patent NO. US0020173449A1
; GENERAL INFORMATION:
; APPLICANT: University of Utah Research Foundation
; APPLICANT: Cogmetix, Inc.
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: Cartier, G. Edward
; APPLICANT: Watkins, Warden
; APPLICANT: Hillyard, David R.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Lyster, Richard T.
; APPLICANT: Jones, Robert M.
; TITLE OF INVENTION: O-Superfamily Conotoxin Peptides
; FILE REFERENCE: 2314-227
; CURRENT APPLICATION NUMBER: US/09/749,637A
; CURRENT FILING DATE: 2000-12-28
; PRIORITY APPLICATION NUMBER: US 60/243,412
; PRIOR FILING DATE: 2000-10-27

```

PRIOR FILING DATE: 2000-07-20
PRIOR APPLICATION NUMBER: US 60/214,263
PRIOR FILING DATE: 2000-06-26

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; PRIORITY FILING DATE: 1999-12-30
; NUMBER OF SEQ ID NOS: 409
; SOFTWARE: PatentIn version 3.0

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;
; TYPE: PRY
; ORGANISM: Conus stercusmuscarum
US-09-749-637A-393

Query Match      85.5%  Score 130; DB 10; Length 82;
Best Local Similarity 84.6%  Pred. No. 5.6e-09;
Matches 22; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY      2 CIXGDLCPRSDHIGQCCGKCAFVCL 27
      |||||
Db      57 CIPGELCPRSDHIQCCSARCAFVCL 82

RESULT 8
US-09-749-637A-373
; Sequence 373, Application US/09749637A
; Patent No. US2002017349A1
; GENERAL INFORMATION:
; APPLICANT: University of Utah Research Foundation
; APPLICANT: Cognetix, Inc.
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: Cartier, G. Edward
; APPLICANT: Watkins, Maren
; APPLICANT: Hilliard, David R.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Layer, Richard T.

```


APPLICANT: Jones, Robert M.
TITLE OF INVENTION: O-Superfamily Conotoxin Peptides
FILE REFERENCE: 2314-227
CURRENT APPLICATION NUMBER: US/09/749,637A
CURRENT FILING DATE: 2000-12-28
PRIOR APPLICATION NUMBER: US 60/243,412
PRIOR FILING DATE: 2000-10-27
PRIOR APPLICATION NUMBER: US60/219,440
PRIOR FILING DATE: 2000-07-20
PRIOR APPLICATION NUMBER: US 60/214,263
PRIOR FILING DATE: 2000-06-26
PRIOR APPLICATION NUMBER: US 60/173,754
PRIOR FILING DATE: 1999-12-30
NUMBER OF SEQ ID NOS: 409
SOFTWARE: Patent in version 3.0
SEQ ID NO 373
LENGTH: 26
TYPE: PRT
ORGANISM: Conus circumcinctus
FEATURE:
NAME/KEY: SITE
LOCATION: (1)..(26)
OTHER INFORMATION: Xaa at residues 3 and 10 may be Pro or hydroxy-Pro.
US-09-749-637A-373

Query Match 84.9%; Score 129; DB 10; Length 26;
Best Local Similarity 88.5%; Pred. No. 2.7e-09;
Matches 23; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2 CIXSGDLCFRSDHIGCCSGKCAVCL 27
DB 1 CIXSGDLCFXSDHIQCCSAKCAVCL 26

RESULT 9

US-09-749-637A-370
Sequence 370, Application US/09749637A
Patent No. US20020173449A1
GENERAL INFORMATION:
APPLICANT: University of Utah Research Foundation
APPLICANT: Cognetix, Inc.
APPLICANT: Olivera, Baldomero M.
APPLICANT: Cartier, G. Edward
APPLICANT: Watkins, Maren
APPLICANT: Hilliard, David R.
APPLICANT: McIntosh, J. Michael
APPLICANT: Laver, Richard T.
APPLICANT: Jones, Robert M.
TITLE OF INVENTION: O-Superfamily Conotoxin Peptides
FILE REFERENCE: 2314-227
CURRENT APPLICATION NUMBER: US/09/749,637A
CURRENT FILING DATE: 2000-12-28
PRIOR APPLICATION NUMBER: US 60/243,412
PRIOR FILING DATE: 2000-10-27
PRIOR APPLICATION NUMBER: US60/219,440
PRIOR FILING DATE: 2000-07-20
PRIOR APPLICATION NUMBER: US 60/214,263
PRIOR FILING DATE: 2000-06-26
PRIOR APPLICATION NUMBER: US 60/173,754
PRIOR FILING DATE: 1999-12-30
NUMBER OF SEQ ID NOS: 409
SOFTWARE: Patent in version 3.0
SEQ ID NO 370
LENGTH: 27
TYPE: PRT
ORGANISM: Conus circumcinctus
FEATURE:
NAME/KEY: SITE
LOCATION: (1)..(27)
OTHER INFORMATION: Xaa at residue 1 may be Trp or bromo-Trp; Xaa at residues 4 and 10 may be Trp or hydroxy-Pro
US-09-749-637A-370

Query Match 84.9%; Score 129; DB 10; Length 27;
Best Local Similarity 88.5%; Pred. No. 2.8e-09;
Matches 23; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2 CIXSGDLCFRSDHIGCCSGKCAVCL 27
DB 2 CIXSGDLCFXSDHIQCCSAKCAVCL 27

RESULT 10

US-09-749-637A-379
Sequence 379, Application US/09749637A
Patent No. US20020173449A1
GENERAL INFORMATION:
APPLICANT: University of Utah Research Foundation
APPLICANT: Cognetix, Inc.
APPLICANT: Olivera, Baldomero M.
APPLICANT: Cartier, G. Edward
APPLICANT: Watkins, Maren
APPLICANT: Hilliard, David R.
APPLICANT: McIntosh, J. Michael
APPLICANT: Laver, Richard T.
APPLICANT: Jones, Robert M.
TITLE OF INVENTION: O-Superfamily Conotoxin Peptides
FILE REFERENCE: 2314-227
CURRENT APPLICATION NUMBER: US/09/749,637A
CURRENT FILING DATE: 2000-12-28
PRIOR APPLICATION NUMBER: US 60/243,412
PRIOR FILING DATE: 2000-10-27
PRIOR APPLICATION NUMBER: US60/219,440
PRIOR FILING DATE: 2000-07-20
PRIOR APPLICATION NUMBER: US 60/214,263
PRIOR FILING DATE: 2000-06-26
PRIOR APPLICATION NUMBER: US 60/173,754
PRIOR FILING DATE: 1999-12-30
NUMBER OF SEQ ID NOS: 409
SOFTWARE: Patent in version 3.0
SEQ ID NO 379
LENGTH: 27
TYPE: PRT
ORGANISM: Conus circumcinctus
FEATURE:
NAME/KEY: SITE
LOCATION: (1)..(27)
OTHER INFORMATION: Xaa at residue 1 may be Trp or bromo-Trp; Xaa at residues 4 and 10 may be Trp or hydroxy-Pro
US-09-749-637A-379

Query Match 84.9%; Score 129; DB 10; Length 27;
Best Local Similarity 88.5%; Pred. No. 2.8e-09;
Matches 23; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2 CIXSGDLCFRSDHIGCCSGKCAVCL 27
DB 2 CIXSGDLCFXSDHIQCCSAKCAVCL 27

RESULT 11

US-09-749-637A-369
Sequence 369, Application US/09749637A
Patent No. US20020173449A1
GENERAL INFORMATION:
APPLICANT: University of Utah Research Foundation
APPLICANT: Cognetix, Inc.
APPLICANT: Olivera, Baldomero M.
APPLICANT: Cartier, G. Edward
APPLICANT: Watkins, Maren
APPLICANT: Hilliard, David R.
APPLICANT: McIntosh, J. Michael
APPLICANT: Laver, Richard T.
APPLICANT: Jones, Robert M.
TITLE OF INVENTION: O-Superfamily Conotoxin Peptides
FILE REFERENCE: 2314-227

```

; CURRENT APPLICATION NUMBER: US/09/749,637A
; CURRENT FILING DATE: 2000-12-28
; PRIOR APPLICATION NUMBER: US 60/243,412
; PRIOR FILING DATE: 2000-10-27
; PRIOR APPLICATION NUMBER: US60/219,440
; PRIOR FILING DATE: 2000-07-20
; PRIOR APPLICATION NUMBER: US 60/214,263
; PRIOR FILING DATE: 2000-06-26
; PRIOR APPLICATION NUMBER: US 60/173,754
; PRIOR FILING DATE: 1999-12-30
; NUMBER OF SEQ ID NOS: 409
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 369
; LENGTH: 31
; TYPE: PRT
; ORGANISM: Conus circumciscus
US-09-749-637A-369

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Query Match      83.6%; Score 127; DB 10; Length 31;
Best Local Similarity 84.6%; Pred. No. 5.5e-09;
Matches 22; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2 CIXSGDLCFRSDHIGCCSGKCAVCL 27
DB 6 CIPSGDLCFPSDHIQCCSAKCAVCL 31

```

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RESULT 12
US-09-749-637A-372
; Sequence 372, Application US/09749637A
; Patent No. US20020173449A1
; GENERAL INFORMATION:
; APPLICANT: University of Utah Research Foundation
; APPLICANT: Cognetix, Inc.
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: Cartier, G. Edward
; APPLICANT: Watkins, Maren
; APPLICANT: Hillyard, David R.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Laver, Richard T.
; APPLICANT: Jones, Robert M.
; TITLE OF INVENTION: O-Superfamily Conotoxin Peptides
; FILE REFERENCE: 2314-227
; CURRENT APPLICATION NUMBER: US/09/749,637A
; CURRENT FILING DATE: 2000-12-28
; PRIOR APPLICATION NUMBER: US 60/243,412
; PRIOR FILING DATE: 2000-10-27
; PRIOR APPLICATION NUMBER: US60/219,440
; PRIOR FILING DATE: 2000-07-20
; PRIOR APPLICATION NUMBER: US 60/214,263
; PRIOR FILING DATE: 2000-06-26
; PRIOR APPLICATION NUMBER: US 60/173,754
; PRIOR FILING DATE: 1999-12-30
; NUMBER OF SEQ ID NOS: 409
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 372
; LENGTH: 31
; TYPE: PRT
; ORGANISM: Conus circumciscus
US-09-749-637A-372

```

```

Query Match      83.6%; Score 127; DB 10; Length 31;
Best Local Similarity 84.6%; Pred. No. 5.5e-09;
Matches 22; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2 CIXSGDLCFRSDHIGCCSGKCAVCL 27
DB 6 CIPSGDLCFPSDHIQCCSAKCAVCL 31

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RESULT 13
US-09-749-637A-378
; Sequence 378, Application US/09749637A

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; Patent No. US20020173449A1
; GENERAL INFORMATION:
; APPLICANT: University of Utah Research Foundation
; APPLICANT: Cognetix, Inc.
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: Cartier, G. Edward
; APPLICANT: Watkins, Maren
; APPLICANT: Hillyard, David R.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Laver, Richard T.
; APPLICANT: Jones, Robert M.
; TITLE OF INVENTION: O-Superfamily Conotoxin Peptides
; FILE REFERENCE: 2314-227
; CURRENT APPLICATION NUMBER: US/09/749,637A
; CURRENT FILING DATE: 2000-12-28
; PRIOR APPLICATION NUMBER: US 60/243,412
; PRIOR FILING DATE: 2000-10-27
; PRIOR APPLICATION NUMBER: US60/219,440
; PRIOR FILING DATE: 2000-07-20
; PRIOR APPLICATION NUMBER: US 60/214,263
; PRIOR FILING DATE: 2000-06-26
; PRIOR APPLICATION NUMBER: US 60/173,754
; PRIOR FILING DATE: 1999-12-30
; NUMBER OF SEQ ID NOS: 409
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 378
; LENGTH: 31
; TYPE: PRT
; ORGANISM: Conus circumciscus
US-09-749-637A-378

```

```

Query Match      83.6%; Score 127; DB 10; Length 31;
Best Local Similarity 84.6%; Pred. No. 5.5e-09;
Matches 22; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2 CIXSGDLCFRSDHIGCCSGKCAVCL 27
DB 6 CIPSGDLCFPSDHIQCCSAKCAVCL 31

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RESULT 14
US-09-749-637A-367
; Sequence 367, Application US/09749637A
; Patent No. US20020173449A1
; GENERAL INFORMATION:
; APPLICANT: University of Utah Research Foundation
; APPLICANT: Cognetix, Inc.
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: Cartier, G. Edward
; APPLICANT: Watkins, Maren
; APPLICANT: Hillyard, David R.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Laver, Richard T.
; APPLICANT: Jones, Robert M.
; TITLE OF INVENTION: O-Superfamily Conotoxin Peptides
; FILE REFERENCE: 2314-227
; CURRENT APPLICATION NUMBER: US/09/749,637A
; CURRENT FILING DATE: 2000-12-28
; PRIOR APPLICATION NUMBER: US 60/243,412
; PRIOR FILING DATE: 2000-10-27
; PRIOR APPLICATION NUMBER: US60/219,440
; PRIOR FILING DATE: 2000-07-20
; PRIOR APPLICATION NUMBER: US 60/214,263
; PRIOR FILING DATE: 2000-06-26
; PRIOR APPLICATION NUMBER: US 60/173,754
; PRIOR FILING DATE: 1999-12-30
; NUMBER OF SEQ ID NOS: 409
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 367
; LENGTH: 26
; TYPE: PRT
; ORGANISM: Conus circumciscus
; FEATURE:

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; NAME/KEY: SITE
; LOCATION: (1)..(26)
; OTHER INFORMATION: Xaa at residues 3 and 10 may be Pro or hydroxy-Pro.
US-09-749-637A-367

Query Match 82.9%; Score 126; DB 10; Length 26;
Best Local Similarity 84.6%; Pred. No. 6.5e-09;
Matches 22; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
QY 2 CIXSGDLCFRSDHIGCCSGKCAFYCL 27
Db, 1 CIXSGDLCFXSDHIQCCNAKCAFYCL 26

RESULT 15
US-09-749-637A-385
; Sequence 385, Application US/09749637A
; Patent No. US20020173449A1
; GENERAL INFORMATION:
; APPLICANT: University of Utah Research Foundation
; APPLICANT: Cognetix, Inc.
; APPLICANT: Oliveira, Baldomero M.
; APPLICANT: Cartier, G. Edward
; APPLICANT: Watkins, Maren
; APPLICANT: Hillyard, David R.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Layer, Richard T.
; APPLICANT: Jones, Robert M.
; TITLE OF INVENTION: O-Superfamily Conotoxin Peptides
; FILE REFERENCE: 2314-227
; CURRENT APPLICATION NUMBER: US/09/749,637A
; CURRENT FILING DATE: 2000-12-28
; PRIOR APPLICATION NUMBER: US 60/243,412
; PRIOR FILING DATE: 2000-10-27
; PRIOR APPLICATION NUMBER: US60/219,440
; PRIOR FILING DATE: 2000-07-20
; PRIOR APPLICATION NUMBER: US 60/214,263
; PRIOR FILING DATE: 2000-06-26
; PRIOR APPLICATION NUMBER: US 60/173,754
; PRIOR FILING DATE: 1999-12-30
; NUMBER OF SEQ ID NOS: 409
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 385
; LENGTH: 27
; TYPE: PRT
; ORGANISM: Conus circumcissus
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (1)..(27)
; OTHER INFORMATION: Xaa at residue 1 may be Trp or bromo-Trp; Xaa at residues 4 and 1
; OTHER INFORMATION: 1 may be Pro or hydroxy-Pro
US-09-749-637A-385

Query Match 82.9%; Score 126; DB 10; Length 27;
Best Local Similarity 84.6%; Pred. No. 6.5e-09;
Matches 22; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
QY 2 CIXSGDLCFRSDHIGCCSGKCAFYCL 27
Db 2 CIXSGDLCFXSDHIQCCNAKCAFYCL 27

Search completed: November 17, 2003, 17:19:22
Job time : 23.1429 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: November 17, 2003, 17:11:13 ; Search time 13.9821 Seconds
(without alignments)
81.704 Million cell updates/sec

Title: US-09-749-637A-271
Perfect score: 152
Sequence: 1 XCIXGDLFRSDHIGCCSGKCAFVCL 27

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 328717 seqs, 42310858 residues

Total number of hits satisfying chosen parameters: 328717

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents AA:
1: /cgn2_6/prodata/1/iaa/5A_COMB.pep:*
2: /cgn2_6/prodata/1/iaa/5B_COMB.pep:*
3: /cgn2_6/prodata/1/iaa/6A_COMB.pep:*
4: /cgn2_6/prodata/1/iaa/6B_COMB.pep:*
5: /cgn2_6/prodata/1/iaa/6C_COMB.pep:*
6: /cgn2_6/prodata/1/iaa/6D_COMB.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	61	40.1	37	1	US-08-682-485A-4
2	61	40.1	37	2	US-08-682-485A-4
3	50.5	33.2	36	2	US-08-505-486-84
4	50.5	33.2	36	3	US-08-801-028-84
5	50.5	33.2	36	3	US-08-340-154-84
6	50.5	33.2	36	4	US-09-482-611B-84
7	50.5	33.2	36	5	PCT-US95-09338-84
8	50.5	33.2	36	5	PCT-US95-09339-84
9	50	32.9	27	1	US-07-689-693B-6
10	50	32.9	37	1	US-08-682-485A-4
11	50	32.9	37	2	US-08-682-485A-4
12	50	32.9	78	1	US-07-689-693B-5
13	50	32.9	78	1	US-08-624-123-13
14	50	32.9	78	1	US-08-716-308-2
15	50	32.9	78	2	US-08-716-308-16
16	50	32.9	78	5	PCT-US96-05262-14
17	49.5	32.6	36	1	US-08-117-080-2
18	49.5	32.6	36	1	US-08-117-080-4
19	49.5	32.6	36	1	US-08-471-329-2
20	49.5	32.6	36	1	US-08-471-329-4
21	49.5	32.6	36	2	US-08-915-142-2
22	49.5	32.6	36	2	US-08-915-142-4
23	49.5	32.6	36	2	US-08-505-486-85
24	49.5	32.6	36	3	US-08-801-028-85
25	49.5	32.6	36	3	US-09-340-154-85
26	49.5	32.6	36	4	US-09-482-611B-85
27	49.5	32.6	36	5	PCT-US95-09338-85

28 49.5 32.6 36 5 PCT-US95-09339-85
29 49.5 32.6 37 1 US-08-117-080-1
30 49.5 32.6 37 1 US-08-117-080-3
31 49.5 32.6 37 1 US-08-471-329-1
32 49.5 32.6 37 1 US-08-471-329-3
33 49.5 32.6 37 2 US-08-915-142-1
34 49.5 32.6 37 2 US-08-915-142-3
35 49.5 32.6 37 2 US-08-505-486-84
36 49.5 32.6 37 3 US-08-801-028-84
37 49.5 32.6 37 3 US-09-340-154-84
38 49.5 32.6 37 4 US-09-482-611B-84
39 49.5 32.6 37 5 PCT-US95-09338-84
40 49.5 32.6 37 5 PCT-US95-09339-84
41 49.5 32.6 61 1 US-08-117-080-10
42 49.5 32.6 61 2 US-08-471-329-10
43 49.5 32.6 61 2 US-08-915-142-10
44 49.5 32.6 63 1 US-08-117-080-12
45 49.5 32.6 63 1 US-08-471-329-12

ALIGNMENTS

RESULT 1
US-08-682-485A-4
; Sequence 4, Application US/08682485A
; Patent No. 5763568
; GENERAL INFORMATION:
; APPLICANT: ATKINSON, RONALD K
; APPLICANT: HOWDEN, MERLIN E.H.
; APPLICANT: TYLER, MARGARET I
; APPLICANT: VONARX, EDWARD J
; TITLE OF INVENTION: Insecticidal Toxins Derived From
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Zeneca, Inc.
; STREET: 1200 South 47th Street
; CITY: Richmond
; STATE: California
; COUNTRY: USA
; ZIP: 94804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/682,485A
; FILING DATE:
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/682,485
; FILING DATE: 17-JULY-1996
; APPLICATION NUMBER: US/08/256,933
; FILING DATE: 27-JULY-1994
; APPLICATION NUMBER: WO 93/15108
; FILING DATE: 29-JAN-1993
; APPLICATION NUMBER: AU PL0722
; FILING DATE: 31-JAN-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Shaw, Melissa A.
; REGISTRATION NUMBER: 38,301
; REFERENCE/DOCKET NUMBER: PPD 5099/D1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 510-231-1542
; TELEFAX: 510-231-1112
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 37 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein


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; FILE REFERENCES: 2093-149
; CURRENT APPLICATION NUMBER: US/09/482,611B
; CURRENT FILING DATE: 2000-01-14
; PRIOR APPLICATION NUMBER: US 08/801,028
; PRIOR FILING DATE: 1997-02-19
; PRIOR APPLICATION NUMBER: US 08/279,472
; PRIOR FILING DATE: 1994-07-22
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 86
; LENGTH: 36
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Lytic Peptide
US-09-482-611B-86

Query Match          33.2%; Score 50.5; DB 4; Length 36;
Best Local Similarity 45.8%; Pred. No. 17;
Matches 11; Conservative 1; Mismatches 7; Indels 5; Gaps 2;

QY      2 CIXSGDLCFRSDHIG---CCSGKC 22
      ||| | | | | | | | | | | | | |
Db      1 CIGGGKGC--QDQGGPPFCCSGYC 22

RESULT 7
PCT-US95-09338-86
; Sequence 86, Application PC/TUS9509338
; GENERAL INFORMATION:
; APPLICANT:
; TITLE OF INVENTION: UBIQUITIN-LYTIC PEPTIDE FUSION GENE
; TITLE OF INVENTION: CONSTRUCTS, PROTEIN PRODUCTS DERIVING THEREFROM, AND
; TITLE OF INVENTION: METHODS OF MAKING AND USING THE SAME
; NUMBER OF SEQUENCES: 98
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WORDPERFECT 5.1+
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/09338
; FILING DATE: 21-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/279,472
; FILING DATE: 22-JUL-1994
; INFORMATION FOR SEQ ID NO: 86:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 36
; TYPE: AMINO ACID
; TOPOLOGY: LINEAR
; DESCRIPTION: PEPTIDE
; MOLECULE TYPE:
; HYPOTHEICAL: NO
; FRAGMENT TYPE: COMPLETE PEPTIDE
; ORIGINAL SOURCE: SYNTHETIC
; IMMEDIATE SOURCE: SYNTHETIC
; PUBLICATION INFORMATION: NOT PREVIOUSLY PUBLISHED
PCT-US95-09338-86

Query Match          33.2%; Score 50.5; DB 5; Length 36;
Best Local Similarity 45.8%; Pred. No. 17;
Matches 11; Conservative 1; Mismatches 7; Indels 5; Gaps 2;

QY      2 CIXSGDLCFRSDHIG---CCSGKC 22
      ||| | | | | | | | | | | | | |
Db      1 CIGGGKGC--QDQGGPPFCCSGYC 22

RESULT 8
PCT-US95-09339-86
; Sequence 86, Application PC/TUS9509339
; GENERAL INFORMATION:
; APPLICANT:
; TITLE OF INVENTION: UBIQUITIN-LYTIC PEPTIDE FUSION GENE
; TITLE OF INVENTION: CONSTRUCTS, PROTEIN PRODUCTS DERIVING THEREFROM, AND
; TITLE OF INVENTION: METHODS OF MAKING AND USING THE SAME
; NUMBER OF SEQUENCES: 98
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WORDPERFECT 5.1+
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/09338
; FILING DATE: 21-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/279,472
; FILING DATE: 22-JUL-1994
; INFORMATION FOR SEQ ID NO: 86:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 36
; TYPE: AMINO ACID
; TOPOLOGY: LINEAR
; DESCRIPTION: PEPTIDE
; MOLECULE TYPE:
; HYPOTHEICAL: NO
; FRAGMENT TYPE: COMPLETE PEPTIDE
; ORIGINAL SOURCE: SYNTHETIC
; IMMEDIATE SOURCE: SYNTHETIC
; PUBLICATION INFORMATION: NOT PREVIOUSLY PUBLISHED
PCT-US95-09338-86

Query Match          33.2%; Score 50.5; DB 5; Length 36;
Best Local Similarity 45.8%; Pred. No. 17;
Matches 11; Conservative 1; Mismatches 7; Indels 5; Gaps 2;

QY      2 CIXSGDLCFRSDHIG---CCSGKC 22
      ||| | | | | | | | | | | | | |
Db      1 CIGGGKGC--QDQGGPPFCCSGYC 22

RESULT 9
US-07-689-693B-6
; Sequence 6, Application US/07689693B
; Patent No. 5231011
; GENERAL INFORMATION:
; APPLICANT: David Hillyard
; APPLICANT: Baldomero M. Olivera
; TITLE OF INVENTION: Segregated Folding Determinants
; TITLE OF INVENTION: For Small Disulfide-Rich Peptides
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Thorpe, No. 5231011th & Western
; STREET: 9035 South 700 East, Suite 200
; CITY: Sandy
; STATE: Utah
; COUNTRY: USA
; ZIP: 84070
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.5 inch, 720 Kb storage
; COMPUTER: Compaq LTE/286
; OPERATING SYSTEM: DOS 4.01
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/689,693B
; FILING DATE: 19910418
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: none
; FILING DATE: na
; ATTORNEY/AGENT INFORMATION:
; NAME: Western, M. Wayne
; REGISTRATION NUMBER: 22,788
; REFERENCE/DOCKET NUMBER: 9925

```

```

; APPLICANT:
; APPLICANT: UBIQUITIN-LYTIC PEPTIDE FUSION GENE
; TITLE OF INVENTION: CONSTRUCTS, PROTEIN PRODUCTS DERIVING THEREFROM, AND
; TITLE OF INVENTION: METHODS OF MAKING AND USING THE SAME
; NUMBER OF SEQUENCES: 98
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WORDPERFECT 5.1+
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/09339
; FILING DATE: 21-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/279,472
; FILING DATE: 22-JUL-1994
; INFORMATION FOR SEQ ID NO: 86:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 36
; TYPE: AMINO ACID
; TOPOLOGY: LINEAR
; DESCRIPTION: PEPTIDE
; MOLECULE TYPE:
; HYPOTHEICAL: NO
; FRAGMENT TYPE: COMPLETE PEPTIDE
; ORIGINAL SOURCE: SYNTHETIC
; IMMEDIATE SOURCE: SYNTHETIC
; PUBLICATION INFORMATION: NOT PREVIOUSLY PUBLISHED
PCT-US95-09339-86

Query Match          33.2%; Score 50.5; DB 5; Length 36;
Best Local Similarity 45.8%; Pred. No. 17;
Matches 11; Conservative 1; Mismatches 7; Indels 5; Gaps 2;

QY      2 CIXSGDLCFRSDHIG---CCSGKC 22
      ||| | | | | | | | | | | | | |
Db      1 CIGGGKGC--QDQGGPPFCCSGYC 22

RESULT 9
US-07-689-693B-6
; Sequence 6, Application US/07689693B
; Patent No. 5231011
; GENERAL INFORMATION:
; APPLICANT: David Hillyard
; APPLICANT: Baldomero M. Olivera
; TITLE OF INVENTION: Segregated Folding Determinants
; TITLE OF INVENTION: For Small Disulfide-Rich Peptides
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Thorpe, No. 5231011th & Western
; STREET: 9035 South 700 East, Suite 200
; CITY: Sandy
; STATE: Utah
; COUNTRY: USA
; ZIP: 84070
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.5 inch, 720 Kb storage
; COMPUTER: Compaq LTE/286
; OPERATING SYSTEM: DOS 4.01
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/689,693B
; FILING DATE: 19910418
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: none
; FILING DATE: na
; ATTORNEY/AGENT INFORMATION:
; NAME: Western, M. Wayne
; REGISTRATION NUMBER: 22,788
; REFERENCE/DOCKET NUMBER: 9925

```

TELECOMMUNICATION INFORMATION:
TELEPHONE: (801) 566-6833
TELEFAX: (801) 566-0750
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 27 amino acids
TYPE: AMINO ACID
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
NAME/KEY: King Kong (kko) conotoxin
IDENTIFICATION METHOD: Direct peptide sequencing
IDENTIFICATION METHOD: of purified Conus textile venom
US-07-689-693B-6

Query Match 32.9%; Score 50; DB 1; Length 27;
Best Local Similarity 42.3%; Pred. NO. 15;
Matches 11; Conservative 2; Mismatches 11; Indels 2; Gaps 2;

Qy 2 CIXSGDLCFRSDHIGCCSGKC-AFVC 26
Db 2 CQSGEMCNLLDQ-NCDDGYCIVLVC 26

RESULT 10
US-08-682-485A-8
Sequence 8, Application US/08682485A
Patent No. 5763568
GENERAL INFORMATION:
APPLICANT: ATKINSON, RONALD K
APPLICANT: HOWDEN, MERLIN E.H.
APPLICANT: TYLER, MARGARET I
APPLICANT: VONARX, EDWARD J
TITLE OF INVENTION: Insecticidal Toxins Derived From
Funnel Web (Atrax or Hadronyche spiders)
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: Zeneca, Inc.
STREET: 1200 South 47th Street
CITY: Richmond
STATE: California
COUNTRY: USA
ZIP: 94804
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/682,485A
FILING DATE:
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/682,485
FILING DATE: 17-JULY-1996
APPLICATION NUMBER: US/08/256,933
FILING DATE: 27-JULY-1994
APPLICATION NUMBER: WO 93/15108
FILING DATE: 29-JAN-1993
APPLICATION NUMBER: AU PLO722
FILING DATE: 31-JAN-1992
ATTORNEY/AGENT INFORMATION:
NAME: Shaw, Melissa A.
REGISTRATION NUMBER: 38,301
REFERENCE/DOCKET NUMBER: PPD 5099/D1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 510-231-1542
TELEFAX: 510-231-1112
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 37 amino acids
TYPE: amino acid
TOPOLOGY: linear

MOLECULE TYPE: protein
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Atrax formidabilis
FEATURE:
NAME/KEY: Modified-site
LOCATION: 37
OTHER INFORMATION: /label= a
OTHER INFORMATION: /note= "this site may be amidated without loss
of biological activity"
US-08-682-485A-8

Query Match 32.9%; Score 50; DB 1; Length 37;
Best Local Similarity 43.5%; Pred. NO. 19;
Matches 10; Conservative 3; Mismatches 8; Indels 2; Gaps 1;

Qy 2 CIXSGDLCFRSDHIGCCSGKCAP 24
Db 4 CIRSGQPCPYNEN-CCSQSCTF 24

RESULT 11
US-08-933-314-8
Sequence 8, Application US/08933314
Patent No. 5959182
GENERAL INFORMATION:
APPLICANT: ATKINSON, RONALD K
APPLICANT: HOWDEN, MERLIN E.H.
APPLICANT: TYLER, MARGARET I
APPLICANT: VONARX, EDWARD J
TITLE OF INVENTION: Insecticidal Toxins Derived From
Funnel Web (Atrax or Hadronyche spiders)
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: Zeneca, Inc.
STREET: 1200 South 47th Street
CITY: Richmond
STATE: California
COUNTRY: USA
ZIP: 94804
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/933,314
FILING DATE:
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/682,485
FILING DATE: 17-JULY-1996
APPLICATION NUMBER: US/08/256,933
FILING DATE: 27-JULY-1994
APPLICATION NUMBER: WO 93/15108
FILING DATE: 29-JAN-1993
APPLICATION NUMBER: AU PLO722
FILING DATE: 31-JAN-1992
ATTORNEY/AGENT INFORMATION:
NAME: Shaw, Melissa A.
REGISTRATION NUMBER: 38,301
REFERENCE/DOCKET NUMBER: PPD 5099/D1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 510-231-1542
TELEFAX: 510-231-1112
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 37 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: NO


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; ANTI-SENSE: NO
; ORIGINAL SOURCE:
; ORGANISM: Atrax formidabilis
; FEATURE:
; NAME/KEY: Modified-site
; LOCATION: 37
; OTHER INFORMATION: /label= a
; OTHER INFORMATION: /note= "this site may be amidated without loss
; OTHER INFORMATION: of biological activity"
; US-08-933-314-8

Query Match 32.9%; Score 50; DB 2; Length 37;
Best Local Similarity 43.5%; Pred. No. 19;
Matches 10; Conservative 3; Mismatches 8; Indels 2; Gaps 1;

QY 2 CIXSGDLFRSDHIGCGSGKCAF 24
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Db 4 CIRSGQPCYNEN--CCSQSCTF 24

RESULT 13
US-07-689-693B-5
; Sequence 5, Application US/07689693B
; Patent No. 5231011
; GENERAL INFORMATION:
; APPLICANT: David Hillyard
; APPLICANT: Baldomero M. Olivera
; TITLE OF INVENTION: Segregated Folding Determinants
; TITLE OF INVENTION: for Small Disulfide-Rich Peptides
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Thorpe, No. 5231011th & Western
; STREET: 9035 South 700 East, Suite 200
; CITY: Sandy
; STATE: Utah
; COUNTRY: USA
; ZIP: 84070
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.5 inch, 720 Kb storage
; COMPUTER: Compaq LITE/286
; OPERATING SYSTEM: DOS 4.01
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/689,693B
; FILING DATE: 19910418
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: none
; FILING DATE: na
; ATTORNEY/AGENT INFORMATION:
; NAME: western, M. Wayne
; REGISTRATION NUMBER: 22,788
; REFERENCE/DOCKET NUMBER: 9925
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (801) 566-6633
; TELEFAX: (801) 566-0750
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 78 amino acids
; TYPE: AMINO ACID
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: Prepropeptide sequence for four loop
; NAME/KEY:
; IDENTIFICATION METHOD: Library was constructed
; IDENTIFICATION METHOD: using polyA selected mRNA transcripts purified
; IDENTIFICATION METHOD: from Conus textile venom duct tissue and cloned
; IDENTIFICATION METHOD: into the Okyama-Berg oligo-dt primed plasmid
; IDENTIFICATION METHOD: pSV7186.
; US-07-689-693B-5

Query Match 32.9%; Score 50; DB 1; Length 78;
Best Local Similarity 42.3%; Pred. No. 35;
Matches 11; Conservative 2; Mismatches 11; Indels 2; Gaps 2;

QY 2 CIXSGDLFRSDHIGCGSGKCAF 26
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Db 53 CKQSGEMCNLLDQ-NCCDGYCIVLVC 77

RESULT 14
US-08-716-308-2
; Sequence 2, Application US/08716308
; Patent No. 5885569
; GENERAL INFORMATION:
; APPLICANT: Windass, John D.
; TITLE OF INVENTION: Biological Insect Control Agent

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Best Local Similarity 42.3%; Pred. No. 35;
Matches 11; Conservative 2; Mismatches 11; Indels 2; Gaps 2;

QY 2 CIXSGDLFRSDHIGCGSGKCAF 26
||| ||| :|: ||| |||
Db 53 CKQSGEMCNLLDQ-NCCDGYCIVLVC 77

RESULT 13
US-08-624-123-13
; Sequence 13, Application US/08624123
; Patent No. 5739276
; GENERAL INFORMATION:
; APPLICANT: Shon, Ki-Joon
; APPLICANT: Grille, Michelle M.
; APPLICANT: Olivera, Baldomero M.
; TITLE OF INVENTION: Conotoxin Peptides
; NUMBER OF SEQUENCES: 13
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Venable, Baetjer, Howard & Civiletti
; STREET: 1201 New York Avenue N.W.
; CITY: Washington
; STATE: DC
; COUNTRY: US
; ZIP: 20005
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/624,123
; FILING DATE:
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/319,554
; FILING DATE: 07-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/423,561
; FILING DATE: 17-APR-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Ihnen, Jeffrey L.
; REGISTRATION NUMBER: 28,957
; REFERENCE/DOCKET NUMBER: 24260-107674-5
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-962-4810
; TELEFAX: 202-962-8300
; INFORMATION FOR SEQ ID NO: 13:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 78 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHETICAL: NO
; US-08-624-123-13

Query Match 32.9%; Score 50; DB 1; Length 78;
Best Local Similarity 42.3%; Pred. No. 35;
Matches 11; Conservative 2; Mismatches 11; Indels 2; Gaps 2;

QY 2 CIXSGDLFRSDHIGCGSGKCAF 26
||| ||| :|: ||| |||
Db 53 CKQSGEMCNLLDQ-NCCDGYCIVLVC 77

RESULT 14
US-08-716-308-2
; Sequence 2, Application US/08716308
; Patent No. 5885569
; GENERAL INFORMATION:
; APPLICANT: Windass, John D.
; TITLE OF INVENTION: Biological Insect Control Agent

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; NUMBER OF SEQUENCES: 18
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ZENECA Inc.
; STREET: 1800 Concord Pike
; CITY: Wilmington
; STATE: DE
; COUNTRY: USA
; ZIP: 19850
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/716,308
; FILING DATE: 24-SEP-1996
; CLASSIFICATION: 424
; PRIOR APPLICATION NUMBER: PCT/GB95/00677
; FILING DATE: 27-MAR-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: GB 9405951.6
; FILING DATE: 25-MAR-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Hohenschutz, Liza D.
; REGISTRATION NUMBER: 33,712
; REFERENCE/DOCKET NUMBER: PPD40027X/UST
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (302) 886-1699
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 78 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-716-308-2

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Query Match 32.9%; Score 50; DB 2; Length 78;

Best Local Similarity 42.3%; Pred. No. 35;

Matches 11; Conservative 2; Mismatches 11; Indels 2; Gaps 2;

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Qy 2 CIXSGDLCFRSDHIGCCSGKC-AFVC 26
Db 53 CKQSGEMCNLLDQ-NCCDGCIVLVC 77

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RESULT 15

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; US-08-716-308-16
; Sequence 16, Application US/08716308
; Patent No. 5885569
; GENERAL INFORMATION:
; APPLICANT: Windass, John D.
; TITLE OF INVENTION: Biological Insect Control Agent
; NUMBER OF SEQUENCES: 18
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ZENECA Inc.
; STREET: 1800 Concord Pike
; CITY: Wilmington
; STATE: DE
; COUNTRY: USA
; ZIP: 19850
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/716,308
; FILING DATE: 24-SEP-1996
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/GB95/00677
; FILING DATE: 27-MAR-1995

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; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: GB 9405951.6
; FILING DATE: 25-MAR-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Hohenschutz, Liza D.
; REGISTRATION NUMBER: 33,712
; REFERENCE/DOCKET NUMBER: PPD40027X/UST
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (302) 886-1699
; INFORMATION FOR SEQ ID NO: 16:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 78 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-716-308-16

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Query Match 32.9%; Score 50; DB 2; Length 78;

Best Local Similarity 42.3%; Pred. No. 35;

Matches 11; Conservative 2; Mismatches 11; Indels 2; Gaps 2;

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Qy 2 CIXSGDLCFRSDHIGCCSGKC-AFVC 26
Db 53 CKQSGEMCNLLDQ-NCCDGCIVLVC 77

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